

Serialization and Subordination in Gullah:
Toward a Definition of Serialization

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1. Introduction

There are about two major ways in which the phrase 'serial verb construction' (SVC), for which the term 'serialization' stands in the title, has been used in the linguistics literature at large. First is the African linguistics tradition,¹ followed by the majority of studies on SVCs in Atlantic creoles from Bendix (1972) to Byrne (1987) and Sebba (1987), passing through Jansen et al. (1978).² According to this, a SVC is, roughly and without the semantic aspect of the definition (disputed below), a sequence of verbs or VPs in a sentence which are interconnected by no coordinating nor subordinating marker (free or bound) and which all share the same subject.³ Second is the Sinologist tradition according to which, as stated by Hansell (1986), SVCs 'are series of two or more VPs, sharing common arguments. . . with no overt marking of linkage' (see also Li & Thompson 1978, 1981 at least for a confirmation of the spirit of the definition).⁴

Below, using data from Gullah, I raise questions on the significance of the semantic component of particularly the Africanist definition of SVCs. I argue that the Sinologist tradition is the least arbitrary definition and probably the closest to being adequate. I defend the position that SVCs constitute a heterogeneous bag of structural and semantic phenomena, and they should be defined in strictly syntactic terms, with emphasis on the sequencing of VPs without a connector and not on structural relations. Like the semantic aspect of serialization, phrase structure, which should be allowed to vary from SVC to SVC, is relevant only to the identification of specific kinds.

Addressed below is also the question of whether serialization is coterminous with subordination, a syntactic strategy whereby a clause functions as a complement either of a verb in a higher clause or of a preposition⁵ (see also Noonan 1985). I argue below that, while the distinction between serialization and subordination appears to be clearcut when a subordinate clause is introduced by a complementizer (Comp) or any other grammatical marker (e.g., the infinitive in Latin), it is hard to sustain and even unnecessary in some other cases. The conception of SVC assumed in this paper (which makes allowance for structural and functional variation) suggests that complementation may represent that part of grammar where subordination and serialization overlap, assuming that grammars are not monolithic.⁶

The rest of this paper is structured around a body of evidence and questions which call for a reassessment of the dominant conception of 'serialization' in studies of Atlantic creoles (Part 2) and lead to a tentative re-characterization of the strategy (Part 3). The phrase SVC is used here as a cover term for both those cases of serialization

involving only verbs and those involving non-verbal predicates. The terms 'serial verb' and 'serial predicate' are used respectively for any verb and non-verbal predicates other than the first in a SVC. The first verbal or non-verbal predicate in a SVC will be called 'head.'

2. The Gullah Data and the Africanist Conception of SVCs.

2.1. The Starting Point

My initial data, which are very similar to those most commonly discussed in creolistics, are given in (1), in contrast with cases of subordination introduced by a Comp (2) and with cases of coordination (3):⁷

- (1)a. \wedge ran go hom (JM)
I ran home.
- b. \wedge tən luk \wedge p fə hə (JM)
I turned [and] looked up for her.
- c. hi \wedge p dɛ: də həmə on də lɛg bəŋ bəŋ fɪks ɛm on də haus
tap ɛn kip on wəkm (PR)
He [was] up there, hammering on that leg, bang bang,
fixing it and continuing to work.
- d. wəʔt pipl bɪn \wedge p dɛ: bəʔ də pləm wəʔn (PR)
A. [There] were white people there buying plum wine.
B. White people were up there buying plum wine.
- e. hi dɪd tɛl sɛn dɪs mæn ɛn tɛl ʌm lɛ də pipl go (LR)
He did send this man and told him [to] let the people go.
- f. dɛ kʁa ʌm draʋv ʌm (LR) They drove him.
- (2)a. \wedge traʋ fə tɛl ʌm (JM)
I tried to tell him.
- b. \wedge hiɛ sɛ rabət tɛʁk sɪk
I heard that Robert fell/took sick
- c. go si ɪf yi mæmə də hom
Go (and) see if your mother is home.
- (3) dɛt hatlɛs tɛʁk ɪ taʁm ɛn kuk (JM)
That 'heartless' takes it time to cook.

2.2. Serialization and Consecutivization

According to the Africanist tradition, sentences such as the following constitute another category called 'consecutivization' and should, strictly speaking, be distinguished from the instances of serialization illustrated in (1):

- (4)a. hi kʁm kʁa mi tə d haspɪtəl (MI)
He came [and] carried/drove me to the hospital.
- b. dɛ kɛ: go dɛ: hɛp pipl (LR)
They can't go there [to/and] help people.

- c. *yu kɛ go tɛ n'vɔ yɔk ɛn stɛʔ fə fɔtɪ yiez kʌm bæk* (PR)
you can go to New York and stay for forty years and come back.
- d. *bɔʔ trɔv t fa:s ʌm lɔk ʌm ʌp ɪn dɛ rum* (JM)
Boy tried to tie her up and lock her up in the room.
- e. *ʃi hiɛ ʌks mi fə go* (JM)
She heard and asked me to go.

The justification behind the distinction seems to be that the constructions in (1) correspond to single events and those in (4) to sequences of separate events. (See, e.g., Hyman 1971.) Although sentences such as below (and no doubt some of those in (1)) fall in the domain of boundary indeterminacy, one wonders whether the notion of what sequence constitutes a single event and what does not is not just an intuitive one without an independent validation mechanism, hence whether it is not subject to interindividual variation and not operational. Even if it were the kind of primitive that has interested philosophers of language since Kenny (1963) and Vendler (1967), one must wonder whether there is any cognitive constraint which precludes the constructions in (4) and (5) from being treated as single events:

- (5) *kʌmɪŋ i:stə ɔl ʌ wi hæv ɛgz / yi no / wi kʌ i:t prɔ* (LR)
Coming on Easter, all of us have eggs... you know... we carry and eat [them]. (LR)

In studies of SVCs in creolistics, the above question has generally been by-passed by the following kind of characterization: SVCs are sequences of VPs which describe events denoted by single verbs or combinations of verbs and prepositions in European languages. Aside from its colonial character,⁸ the usefulness of this characterization seems dubious. For instance, the SVCs in (1a) and (1c) may be claimed intuitively to characterize single conflated events; however their English translations do not consistently correspond to single verbs. Reference to European languages is thus not as enlightening as suggested by the characterization. Note also that while the English translation of the SVC in (1a) is a single verb (by the process of lexical incorporation, in the tradition of generative semantics⁹), the French translation below calls for more than one clause, which questions again the characterization of serialization by the status of its translation:

- (6) Je suis allé à la maison en courant.
I be/AUX go to the house in running

However, the verifiability of the notion of event is not the only problem. There is in a great deal of the literature no syntactic distinction, structural or otherwise, which may be associated with the distinction serialization vs. consecutivization. Only in some languages with some morphology are consecutive constructions associated with a conjunction-like affix on the serial verb or VP (e.g., Feʔfeʔ and Igbo, discussed by Hyman 1971; Old Irish, Middle Irish, and Hittite, discussed by Disterheft 1985, 1986a, 1986b). So for a large part of the literature the question arises of what the

motivation and the analytical rewards are for postulating a serialization/consecutivization distinction.

As shown above, there are no reliable semantic criteria for assuming the distinction in the absence of morphosyntactic ones. What Disterheft (1986a: 295) observes below is equally significant:

While consecutives may act like serials, the latter do not always express the semantic properties usually ascribed to them. In (7) the Akan serial expresses two distinct actions rather than a single one:

- (7) Kofi ako aba (Schachter 1974: 266)
 Kofi has-gone has-come
 Kofi has gone and came back.

I submit that the serialization/consecutivization distinction be abandoned for those languages which present no morphosyntactic evidence for it. For reasons which, I hope, become clear below, I also propose that the term 'serialization', which means nothing more than sequencing, be retained for the union of the constructions illustrated in (1), (4) and (5).

2.3. *The Status of the Shared NP*

There is yet another problem. Consistently with the Africanist tradition, only cases of shared subject NP have been adduced to this point.¹⁰ The question arises of whether the above constructions are that different from those below where the shared argument is understood as the subject of the serial verb but as the object of the head verb.

- (8)a. A də tɛl rani brɪŋ mi sɔntɪn (JM)
 I am telling Ronnie [to] bring me something.
 b. A tɛl ɔn stap (LW)
 I told him [to] stop.
 c. ə fɛlɔ nɛŋ mi kɪl d mən myul (EH)
 A) A fellow named me [as the] kill[er of] the man's mule.
 B) A fellow said I [had] killed the man's mule.
 d. prɔ tɪŋk A go si d daktə fɪks mɛdɪsɪn fə mi¹¹ (JM)
 I think I'd go and see the doctor to fix some medicine for me.

These constructions share with those in (1) the following characteristics: a) no connector (preposition/conjunction or Comp) occurs between the serial verb and the head predicate; b) the serial verb has no overt subject NP;¹² c) the understood subject corresponds to a NP which is an argument of the head. The only difference lies in that this null subject does not correspond to the subject of the head in (8). The question is whether this structural difference and the fact that the latter constructions are not implicative are significant enough to restrict an otherwise more general construction whose primary feature appears to be the sequencing of PredPs (verbal and other-

wise) without a connector between them.

In other words, if it is justified to exclude the constructions in (8) because of the above reasons, then similar considerations must argue against identifying a class of SVCs as broad as suggested by the sentences in (1). Functionally or semantically, the serial verbs in (1) are not uniformly related to their heads. As argued below (Section 2.6), neither is their structural relation to the head predicate uniform. If these differences are so significant here, then the emphasis should not be on serialization, which pertains to sequencing and would otherwise be a misnomer. Consequently, we might as well deal with the specific kinds only and invent other terms for these. I know of no non-arbitrary morphosyntactic criteria, which must be the primary consideration, nor of any semantic ones for excluding the constructions in (8) from the general category of SVCs. The common features specified above militate instead for their inclusion.

2.4. *Tense and Aspect in SVCs*

It has also been somewhat stipulated that serial verbs must have the same tense and aspect as their heads and these are specified only once in the construction, on the head predicate. This stance would exclude not only some of the constructions which Byrne (1987) has adduced from Saramaccan and where the serial verb but not the head may be marked for tense, but also some of the constructions above.¹³ For instance, in (8a), the durative marker *də* delimits only the head and not the serial verb. In fact the latter is generally assumed to be tenseless in such a structural position. In Gullah, there are also constructions such as (1c) and below where the serial verb is overtly marked for aspect but the preceding verb is not:¹⁴

- (9)a. *də pipl də: ɪn də fi:l də wək*
The people were in the field, working.
c. *ʌ hiər hɪm grɪn də tək* (LW)
I heard him again talking.

These data raise the question of what serialization as sequencing of predicates has got to do with agreement in tense and aspect, even though this is often the case (especially where an implicative relation holds between the serial verb and the head). Except for the difference in aspect marking, these constructions are analogous to those already acknowledged as SVCs: the PredPs are sequenced without a connector, and they share a NP which is understood as the subject of the serial verb. It seems arbitrary to exclude them.

Of course the same data also raise the question of the scope of tense and aspect markers, especially when they appear before the head predicate. However, since the question does not seem to bear on the definition of serialization, it need not be addressed here. Byrne (this collection) addresses it.

2.5. *Serialization and Auxiliation*

There seems to be a pattern which has excluded from the category of SVCs those constructions where the first verb may be interpreted to have an auxiliary-verb function in relation to the second verb.¹⁵ One such construction is the following:

- (10) *ma sista go te:n da rola* (JM)
My sister will turn the roller.

What is question-begging about this criterion is the apparently a-prioristic way in which the category of 'auxiliary verbs' has been assumed in creoles and other languages which utilize serialization, especially those with no inflectional morphology.¹⁶ For instance, note the syntactic similarity between the construction *go te:n* in (10) and the apparently SVC *go si* 'go and see' in (8d), even though they are translated differently. However, Bendix (1972) suggests that when the interpretation (qua translation?) is different, we must be dealing with two different verbs in the first position and only the one that is not an auxiliary is involved in a SVC. As proposed in Section 2.2, there is no reason why semantics must be a component of the definition of serialization. After all, not all syntactic strategies have a semantic basis; see, for instance, the heterogeneity of facts covered by the *that* complementation in English!.

Even though there are semantic constraints regarding which verbs or predicates may precede or follow which others, there seems to be no independent morphosyntactic evidence for assuming a priori, in the case of Gullah, Atlantic creoles, and other serializing languages with no inflectional morphology, that some verbs are auxiliary and therefore cannot be used in a SVC. On the contrary, I would have expected serialization (more specifically, the kind corresponding to complementation -- discussed below in Section 2.7) to be the transitional strategy through which verbs such as *go*, used preverbally, would have acquired the putative status of auxiliary verb. (See, e.g., Givón 1971 and Mufwene 1983).

2.6. *Are SVCs Structurally Uniform?*

SVCs have generally been discussed as though they constituted a uniform type of syntactic structure. With few exceptions (e.g., Schachter 1974, Voorhoeve 1975, and Sebba 1987), most studies I know of have consistently assigned the same phrase structure to all SVCs. For instance, pace Jansen et al. (1978), Bickerton (1984) and Byrne (1987) assign to all their SVCs the following phrase structure:

- (11) [_{VP} V (NP) [_S COMP [_S prox VP]]]¹⁷

If the role of phrase structures is to illustrate the structural relations between the different constituents of a sentence, hence to highlight differences in the syntactic functions of individual constituents, the data presented so far certainly militate against assigning a uniform phrase structure to all SVCs. With the exception of

the constructions in (8a-c) and (10), phrase structure (11) hardly represents the structural relations of most of the SVCs discussed so far. For instance, in the sample (1a-c) the relation between the head predicate and the serial verb may be considered to be a simple juxtaposition of conjunct-like constituents, like in a coordinate construction.¹⁸ On the other hand, the serial verb in (1f) specifies the means of transportation, i.e., with an S node which is a VP complement or adjunct, as below, rather than as a V complement, as in (11):

- (12) [_{VP} VP [_S COMP [_S pro VP]]]¹⁹

This phrase structure may also be suitable for the SVC in (4b), where the serial verb specifies the purpose of the motion. As indicated in Mufwene (1989b), this phrase structure will in principle also allow the object of the serial verb to be fronted to the beginning of the whole sentence, as evidenced independently by sentences such as (13) from English:

- (13) What obscenities did Carla walk out of here mumbling *t_i* about Dick?

The point is that the syntactic models used so far to describe SVCs require different phrase structures for different syntactic relations. Following them entails that different serial verbs must be assigned different structural relations to their heads, depending on whether they are interpreted as conjunct-like, adverbial-like, complements, etc. Hence SVCs such as in the following sentences (with the same lexical items) not only are associated with different interpretations and constituent orders but must be assigned different structural analyses, because the serial verb in each SVC just plays a different function. While *t_{o:k}* in (14a) is the object of *dən*, *dən* in (14b) is conjunct-like and is not an object or any other complement of the head verb. In other words, the difference between the two sentences involves more than change in the positions of the verbs.

- (14)a. \wedge [*dən* [_S *prə* *t_{o:k}*]]
I have finished talking.
b. \wedge [_{VP} [_{VP} *t_{o:k}*] [_{VP} *dən*]]
I have spoken and finished [and don't intend to speak again].

The above discussion is not, however, the only solution to these data. Alternatively, we could abandon the syntactic models alluded to here and their working assumptions altogether. For instance, we could claim, instead, that as a surface-structure phenomenon, SVCs stand somewhere between configurational and non-configurational syntax, though I find no justification for this departure from the tradition. (Hale's 1985 idea of 'secondary predication' without a fixed phrase structure is worthwhile considering in this connection.) Whichever way we go, though, some justification is required for the position. This paper simply shows that some of the literature seems to have assigned the structures quite arbitrarily and we should get out of this practice.

2.7. SVCs and Complementation

The set of constructions in (15) illustrates another kind of verb sequencing which Sinologists have acknowledged as SVC. I have generally not seen this discussed in the creolists' accounts of serialization, except for Byrne (1987). Seuren (1988, see also this collection) explicitly excludes it, claiming that it is a regular case of complementation.

- (15)a. \wedge w3 go (common)
I want to go.
b. \wedge tra^v tok (common)
I tried to talk.
c. de stat te^vk ap də manɪ (JM)
They started to take up the money.
d. \wedge ʔ no fiks də brəd wɪ wətə (JM)
I don't know how to bake bread with water.

The question is whether serialization and complementation or subordination, with which complementation has been confused (cf. n. 6), should be treated as having mutually exclusive structures. For instance, Haiman and Thompson (1984:511) list the following properties as typical of subordination:

1. Identity between the two clauses of subject, tense, or mood
2. Reduction of one of the clauses
3. Grammatically signaled incorporation of one of the clauses
4. Intonation linking between the two clauses
5. One clause is within the scope of the other
6. Absence of tense iconicity between the two clauses
7. Identity between the clauses of speech act perspective.

It is hard to assume that these properties are definitional. For instance, there are subordinate clauses which are not reduced, especially those which are finite. Regarding tense and mood, infinitival clauses in English pose problems. In constructions such as *I want to get into this matter*, the infinitival clause, underlined, is said to be tenseless, at least morphologically. Also, as far as I know, the infinitive is a different mood from the indicative. In addition, in a sentence such as *I expect them to have abandoned some of these criteria*, the infinitival clause refers to an event that is anterior to the state of expecting, even though the clause may also be claimed to be morphologically tenseless.

However, leaving this criticism aside, it is hard to miss the fact that most of these features apply also to SVCs. Even though Byrne (1987) claims that in Saramaccan some serial verbs may have their own subjects, most of the SVCs discussed in the literature share property 1 with Haiman and Thompson's subordinate clauses. They also share properties 2 and 4, and, even in assuming the Byrne-Bickerton phrase structure, also property 5.²⁰ There are also SVCs such as in (1) which share property 7 with subordination. So the only differences between this and serialization seem to lie with property 3 and appar-

ently also property 6, if we rule out, or treat as exceptional, some of the Saramaccan SVCs discussed by Byrne (see also Boretzky 1988 for Ewe) in which tense is borne by the serial verb but not by the head predicate. (According to Boretzky, such SVCs are highly constrained, depending on what heads a particular SVC in Akan languages. These properties are of course not those that distinguish complements from other subordinate clauses. I do not, however, see any formal property which may be adduced to distinguish complements from SVCs. Nor do I see what is to be gained in assuming that this distinction is syntactic (regarding here the structural arrangement of word-size and larger constituents in sentences) rather than the kind of distinction proposed in n. 6.. That is, the notion of 'complement' has to do with function while those of 'serialization' and 'subordination' have to do with arrangement and status of PredPs and clauses. Otherwise, the notions overlap in what they were intended to do in grammatical theory.

One might still dispute the conclusion that property 3, the most reliable one so far, helps tell subordination from serialization. It may be claimed that the following underlined clauses in English do not have a marker signalling their incorporation in the larger sentence and subordination to the higher verb:

- (16)a. They made him reveal everything.
- b. Bill saw Jane and Paul leave Larry's room in a hurry.
- c. You might help me solve this problem.

One way to salvage the operability of property 3 is to argue that the infinitive in English is marked by a zero affix on the verb and thus the zero affix is as much a grammatical marker of subordination as any other overt marker. No such null marker need then be assumed of the connection between PredPs in serialization. Consequently, no COMP should be provided in phrase structures such as (11) and (12) above. However, things are getting fuzzy here and I hope future studies will clarify what actually distinguishes the cases of subordination in (16) from cases of serialization. Assuming that the infinitive is a different mood, indicated in English by a zero marker, mood may be considered a useful criterion in the distinction. Serialization may require that all PredPs involved in the construction be in the same mood; subordination may, on the other hand, make no such a requirement. There might even be some additional language-specific conditions, such as suggested by the following of the many examples discussed by Pullum (1990), assuming that constructions such as *go get*, *come get*, and *help get* are SVCs. The underlinings are mine:

- (17)a. Come fly with me.
- b. I told you to go get the paper.
- c. *Everyday my son goes get the paper.
- d. *Everyday my son goes gets the paper.

Iconicity in the sequencing of PredPs relative to the states of affairs they describe is certainly an important consideration though not in the way formulated by Haiman and Thompson for property 6. The syntactic and tense relations of subordinate clauses to their main

clauses need not be iconic relative to the states of affairs they describe; those of SVCs apparently must be. As Tai (1985) observes, in the absence of fixed structural and morphological patterns, iconicity constraints and pragmatics keep things manageable. (See also Li and Thompson 1978.) Note that, after all, the grammatical signals only reflect what conceptually precedes and could be expressed in a variety of ways: states of affairs in the speakers' experiences and how they are related to one another. This observation has nothing to do with the assumption by some creolists (notably, Bickerton 1981, 1984) that in the development of languages, serialization precedes subordination. (See also Manessy 1985 for a similar criticism.) There is no convincing evidence for this assumption even in the creoles that Bickerton based his assumption on. Byrne (1987) and Muysken (1987) show clearly that SVCs in Saramaccan alternate with prepositional constructions, disputing Bickerton's assumption that serialization serves to mark Case in the absence of prepositions in radical or stereotypic creoles, which use them.

2.8. Possible Constraints on SVCs

One last question may be addressed here, viz., what kinds of predicates (verbal and non-verbal) may be used in SVCs and in what order? Most discussions of serialization have dwelled on events, i.e., ACTION - ACTION sequences. Sentences (9) illustrate that ACTION - STATE sequences are possible, assuming here, as in Mufwene (1984), that the durative or progressive aspect is the grammatical means of expressing stativity with verbs which do not rank high on the scale of lexical stativity. There are also sentences such as (1c&d), (4c), and (14) which illustrate STATE - ACTION sequences.

Constructions such as in (1a), *rvi go*, and in (1c), *de hame ... fiks m*, are quite commonly cited, with the additional interest that the part which corresponds to the participial adjunct in either French or English comes first instead of second (while the vast majority of PCs are SVO languages). However, sentence (1f) illustrates with *ka dra v* that the adverbial component may follow. This shows that, even semantically or functionally, things in serialization are far from being either uniform or homogeneous.

3. Conclusions

A number of other questions could have been addressed above which conventional limitations of space will not allow me to pursue here, for instance, what is the evolutionary and developmental significance of serialization among the strategies of complex-sentence formation in Gullah and creoles in general, and what are the different kinds of semantic functions most often assumed by serial verbs and why? This will be addressed in future stages of research on serialization. Suffice it to say that, like other creoles, Gullah also has SVCs (contrary to my assumption before researching for this paper), and we can learn something from the sample presented here.

Based on the discussion above (Section 2.1-2.7), it seems that the term 'serialization' applies to a heterogeneity of syntactic relations and semantic functions. This is not to say that these facts share nothing grammatically. On the contrary, the paper has argued that what the different SVCs share is a particular type of linearity, viz., the sequencing of predicates or PredPs without an overt marker of either subordination or coordination and the fact that each serial predicate shares a NP (which functions as its subject) with the preceding predicate. Iconicity in the sequencing of the constituents of a SVC relative to the states of affairs they describe appears to be significant, along with the sharing of mood and tense; however, nothing seems to argue for the sharing of aspect. It is possible that when tense is expressed only once and is borne only by the serial predicate, we may be dealing with some (highly) constrained exceptions, as suggested by Boretzky (1988). However, future research, such as by Byrne (this collection) on tense spreading will shed light on the subject-matter. There is already crosslinguistic variation regarding whether or not verbs inflected with tense may participate in serialization. For instance, they do not in Kituba but do in Lingala (Mufwene 1990:102; Mufwene and Dijkhoff 1989:326-28).

The fact that the shared NP is sometimes the subject of the head predicate and at some others its object seems to be irrelevant to the definition of serialization. As a special kind of linearity, serialization is in itself a grammatical phenomenon of interest; after all, syntax is not only about phrase structure and function of constituents, it is also about how constituents (word-size ones in the present case) are sequenced. Serialization highlights variation regarding whether a connector is or is not used in complex-sentence formation strategies. Any definition of it in general that invokes semantics or phrase structure appears to be arbitrary and not to take all the facts into consideration. Most of the definitions used so far have been too restrictive.

Notes

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1. See, e.g., Stahlke (1970), Hyman (1971), Awobuluyi (1973), Bamgbose (1973, 1982), Lord (1973, 1976, 1982), Oyelaran (1982), and Manessy (1985). On the other hand, there are some exceptions to this generalization, e.g., Pulleyblank (1988).

2. To keep the list short, only a sample of studies which are specifically or predominantly on SVCs are cited here.

3. Emphasis is placed here on the syntactic aspect of the definition, which this paper intends to highlight as the definitional

and most important facet of serialization. Other specifics are discussed below.

4. The ellipsis stands for the following part of his definition, which is rather irrelevant: 'and exhibiting zero anaphora.' In fact it is rather disputable for those like myself who assume that there is no uniform syntactic structure for SVCs and for those like McCawley (1988) who assume that conjoined and presumably coordinate-like structures involve no null anaphora.

5. The term 'preposition' is used in this definition as subsuming also subordinating conjunctions, treated in, e.g., McCawley (1988) as prepositions with sentential complements.

6. As shown in Mufwene (1988, to appear), a number of strategies in grammar overlap, suggesting that grammars are not structured like monolithic sculptures, where lines and cuts do not overlap. At least for the purposes of this paper, I assume that the term 'subordinate' has a strictly syntactic function, whereby a clause is given a secondary status, as with adverbial clauses. The term 'complement' means primarily 'that which makes a thing complete,' suggesting that its absence from some constructions may produce oddity. These terms are not semantically coextensive. For instance, in English, adverbial clauses introduced by conjunctions are both subordinate clauses (with the conjunction serving as the subordinator) and complements of the conjunctions. However, participial clauses are morphologically marked as subordinate while they are complements of nothing.

7. Most of the data discussed here are cited from tape recordings of spontaneous speech. The parenthesized initials identify the speakers. Those which are not so identified have been elicited. The transcription is phonetic. The underscore identifies the relevant sequence of predicates in SVCs (1), the relevant Comps(2), or the relevant coordinator (3).

8. This reflects the failure of many studies to consider new data independently of the Indo-European linguistic categories in which we have received most of our training. (See Mufwene 1989a for a detailed discussion.)

9. See, e.g., Talmy (1975) for a discussion of this lexical process.

10. Voorhoeve (1975:24) is quoted by Sebba (1987) to stipulate that VP₂ accepts the nearest NP as subject." In creole studies, they and Seuren are among the few exceptions to the observation made

here.

11. There is another reason why some creolists would not identify this construction as serial: it is not implicative (see, e.g., Seuren 1988), nor is *si* a control verb. However, these semantic considerations seem to be a priori. Like the other semantic evidence considered so far, they fail to have a syntactic correlate which justifies the restriction.

12. According to Lefebvre (1988), it is, instead, the serial verb that has an overt argument and the preceding verb lacking one. The proposal is, however, in violation of the c-command constraint on anaphora, as more accurately reformulated by Reinhart (1983), viz.,

In any labeled tree, a node X^1 c-commands a node X^2 if and only if X^2 is dominated by the lowest node of a major category (i.e. S, NP, or X') that dominates X^1 , or by a modifier of that node.

13. From a syntactic point of view, I assume that even in isolating languages tense and aspect markers qua predicate modifiers form with the predicates which they modify units of the same grammatical category. For the purposes of this study, these combinations count as one predicate and thus qualify for serialization.

14. Bendix (1972) is to my knowledge the only other study (aside from Byrne 1987) which would recognize the constructions in (9) as SVCs.

15. Bendix (1972) excludes them explicitly, and this is one of the negative criteria listed by Jansen et al. (1978) for the identification of a SVC.

16. See Manessy (1985) for a criticism of Jansen et al. (1978) in this regard.

17. Sebba (1987) also adopts this phrase structure as a kind of waste-basket analysis for non-coordinating SVCs, a mixed bag which he characterizes as "subordinating."

18. Co-ordination itself is semantically a mixed bag with regard to the temporal relation of the events to one another. However, this may be disregarded here, since this paper shows that syntax is what makes serialization different from other strategies for forming complex sentences.

19. I am not certain that a COMP is required in this structure; further research will determine this. The reason for the uncertainty is that SVCs are distinguished from other types of complex sentences by the absence of an overt connector, including a Comp, between PredPs (certainly incomplete clauses in some cases). However, this does not necessarily preclude positing an underlying COMP where other language-internal evidence (e.g., the structures of interrogative clauses or of embedded clauses with an overt Comp) may suggest the presence of a COMP that must be empty in the surface structure of a SVC.

20. Assuming McCawley's (1988) account of coordinate structures by factoring out shared constituents (without positing a null anaphor in conjuncts other than the first), SVCs with conjunct-like serial verbs do not count for property 2. However, this very consideration that excludes them brings them closer to coordinate structures, suggesting that SVCs are like other better established syntactic constructions in a number of ways.

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